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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/973,812	10/11/2001	Hidetoshi Shinada	Q63764	7810
7590	05/16/2005		EXAMINER	
SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC 2100 Pennsylvania Avenue, N.W. Washington, DC 20037-3213				FULLER, RODNEY EVAN
		ART UNIT	PAPER NUMBER	2851

DATE MAILED: 05/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SFM

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/973,812	SHINADA, HIDETOSHI	
	<b>Examiner</b>	<b>Art Unit</b>	
	Rodney E. Fuller	2851	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 11 October 2001.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-6 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 11 October 2001 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**RODNEY FULLER  
PRIMARY EXAMINER**

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/11/01; 12/30/03.

- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Bradburn (EP 0915613 A1).

Regarding claim 1, Bradburn discloses "a light source (Fig. 7, ref.# 53) for outputting the light beam modulated with the image information (paragraph 0001, lines 1-3); a plurality of exposure heads (Fig. 7, ref.# 51, 52) disposed on a circular surface

(Fig. 7, ref. # 50) at an angularly spaced interval, for guiding the light beam outputted from said light source to the photosensitive medium (paragraph 0001, line 2); and a switcher (Fig. 9, ref.# 83) disposed between said light source (Fig. 7, ref.# 53) and said exposure heads (Fig. 7, ref.# 51, 52), for guiding the light beam outputted from said light source to a selected one of said exposure heads which faces the photosensitive medium; whereby said light beam can be guided selectively to the exposure heads to record an image on said photosensitive medium (paragraph 0022, lines 21-24)."

Regarding claim 2, Bradburn discloses "wherein said light source, said switcher, and said exposure heads are connected by optical fibers ." (paragraph 0027, lines 7-9)

Regarding claim 3, Bradburn discloses "wherein said light source comprises a plurality of laser diodes (Fig. 9, ref.# 35) for outputting respective laser beams to be modulated with the image information (paragraph 0029, lines 21-22), each of said exposure heads (Fig. 7, ref.# 51, 52) having means for applying said laser beams (Fig. 7, lined arrows from ref.# 51, 52) outputted from said laser diodes simultaneously to said photosensitive medium."

Regarding claim 4, Bradburn discloses "wherein said angularly spaced interval at which said exposure heads are disposed on the circular surface corresponds to an angle subtended by said partly cylindrical inner circumferential surface at a central axis thereof." (Figure 7 shows the exposure heads angularly spaced such that one head is directed downward and the second head is directed upwards, i.e., 180 degree.)

Regarding claim 5, Bradburn discloses "wherein said switcher (Fig. 9, ref.# 83) comprises optical waveguides for electrically controlling a path of said light beam." (See paragraph 0026, lines 58 to line 3 of column 6)

Regarding claim 6, Bradburn discloses "an optical fiber (Fig. 7, ref.# 56, 58) connected to said light source (Fig. 7, ref.# 53), wherein said switcher (Fig. 9, ref.# 83) comprises a movable member for selectively connecting said optical fiber to said exposure heads (paragraph 0026, lines 58 to line 3 of column 6)."

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Shinada (US 6,252,694) discloses an internal surface scanning image recording apparatus that includes a plurality of exposure heads.
5. NOTE: Jenkins (US 1,533,422) was listed as an X-reference in the European Search Report for application EP01124052. However, Jenkins does not disclose (claim 1) "a switcher disposed between said light source and said exposure heads" or wherein the (claim 2) "exposure heads are connected by optical fibers."
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney E. Fuller whose telephone number is 571-272-2118. The examiner can normally be reached on 8:00am - 4:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rodney E Fuller  
Primary Examiner  
Art Unit 2851

May 12, 2005

